

# **Construction News**

Center Operations Directorate, Construction of Facilities Division (TA-B3)

December 2010

Welcome to the December issue of the *Construction News*. Our goal is to raise awareness about Kennedy Space Center's (KSC) construction activity and to promote work force safety by sharing information about ongoing projects and their associated hazards. If you have comments or suggestions, please reach the TA-B3 point of contact, Sonia Miller, at 867-0580.

## **Construct Replacement Propellants North Administration and Maintenance Facility**

Project Manager/Lead Design Engineer/Construction Manager: Frank Kline, 867-8418

Contracting Officer: Bradley O'Toole, 867-2139

The construction of the new Propellants North facility is nearing completion. This project will replace three 40-year-old-plus structures in the Converter Compressor Facility area, providing new space for maintenance shops, offices, equipment and material storage in support of cryogenic fuel transfer functions for KSC. This project will significantly improve the complex and provide a healthier and more energy-efficient work environment for personnel. Contractor H.W. Davis Construction. started construction in September 2009. Recent work includes installing the 80-kilowatt solar array, erection of the electric vehicle solar powered charging canopy, paving of the parking areas and installation of the drip irrigation system and native



landscaping. The new 11,340 square-foot facility is striving to be KSC's first Platinum-certified, "net-zero" facility, which means the building will produce enough renewable energy onsite to offset all its consumption from the KSC utility grid. The Platinum status is the highest level achievable under the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system, a certification program and nationally accepted benchmark for the design, construction and operation of high-performance green buildings. The facility is scheduled for completion this month. Additional construction and demolition work are expected to continue into April 2011. Please be advised that the areas under construction are off-limits to non-essential personnel and exercise caution in the vicinity of construction zones.

Design Firm: Jones Edmunds and Associates Construction Contractor: H.W. Davis Construction

Construction Start: September 2009 Construction Finish: April 2011

#### Replace Ordnance Operations Facility, K7-0558

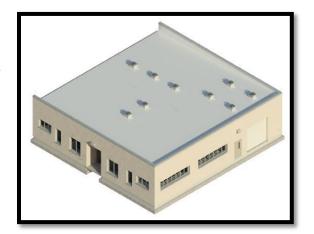
Project Manager/Lead Design Engineer: Mick Barth, 867-0487

Construction Manager: Ed Tobin, 867-4405 Contracting Officer: Bradley O'Toole, 867-2139

This project replaced the existing 40-year-old Ordnance Operations Facility with an energy-efficient, 3,500 square-foot facility. The new Ordnance Operations Facility is located at the entrance to the Ordnance Storage Facility, a secured zone, and serves as the administrative hub for the area. Deconstruction of the existing facility began Nov. 15. Be advised that construction areas are off-limits to non-essential personnel and please exercise caution in the vicinity of construction zones.

Design Firm: Jones Edmunds and Associates Construction Contractor: Canaveral Construction

Construction Start: November 2010 Construction Finish: November 2011



#### **Scour Protection Project**

Project Manager/Lead Design Engineer/Construction Manager: Dan Hull, 867-3981

Contracting Officer: Allan Jones, 867-3463

The scope of work for this project is to place scour protection at the base of the bascule bridge piers at the Indian River, Banana River, Jay Jay Railroad and Haulover Canal bridges. Scour is the erosion of soil surrounding a bridge foundation, which leads to instability followed by rotation or collapse of the bridge in

safely.



In addition to placing the marine mattresses, the contractor will replace subaqueous control cables at the Jay Jay Railroad and Indian River bridges. If lane closures are required they will be scheduled during the weekend or non-peak hours. Please observe all construction traffic signs and drive

storm conditions. Misener Marine Construction is in

mattresses with large rectangular rocks and placing them at the Jay Jay Railroad Bridge. Once placed, the marine mattresses are tied together to form a layer of protection on the river bottom. The project

the process of filling plastic mesh marine

is about 20 percent complete.

Design Firm: Jones Edmunds and Associates Construct Contractor: Misener Marine Construction

Construction Start: July 2010 Construction Finish: August 2011

#### Operations and Checkout (O&C) Revitalization, Phase 4 and Phase 5

Project Manager/Lead Design Engineer: Thomas Wilczek, 867-8109

Construction Manager: Bruce McBride, 867-7078 Contracting Officer: Anthony Caruvana, 867-3464

The O&C revitalization project is transforming the 40-year-old-plus facility north wing into a modern, open-office environment. The first three of five phases have been completed, and Phase 4 activation activities have begun. Phase 4 will be completed this month, concluding the renovation process for the upper floors.

Phase 5 modifications to the entire first floor will begin in January 2011, and will be completed in two increments (east half, followed by west half), each lasting about one year. This approach is similar to the previous construction phases 1 through 4. Near the end of 2011, the Health and Wellness Center will be closed for three months in order to remodel the space with architectural, HVAC and electrical system upgrades. The remodeling of the Sundry Shop, RehabWorks, and Massage Therapy offices will require temporary relocation to the west end of the first floor. Upon completion, they will be relocated back to their upgraded permanent locations on the east half of the first floor. There will be construction noise and scheduled utility service interruptions during the renovation,



which also includes elevators and stairwells. Personnel should use caution in the vicinity of all O&C construction areas, and obey all detour and warning signs.

Design Firm: Jacobs Engineering (Phase 4 and Phase 5)

Construction Contractor: Speegle Construction II, (Phase 4), Sauer (Phase 5)

Construction Start Phase 4: December 2009 Construction Finish Phase 4: December 2010 Construction Start Phase 5: January 2011 Construction Finish Phase 5: February 2013

### Feeder Upgrades - Industrial Area

Project Manager: Alfredo Lopez Estrada, 861-3691 Lead Design Engineer: Huong Nguyen, 867-4740 Construction Manager: James Nelson, 867-0176 Contracting Officer: Kim Sweep, 867-7503



The intent of this project is to upgrade and replace power feeders in the Industrial Area, improving the reliability of electrical utility service for NASA and its partners for years to come. Traffic safety will be a concern because work will be performed alongside roadways and on overhead power lines. Travelers should pay attention to all detours, warning signs and reduced speed limits, and exercise appropriate caution when workers are present along roadways.

Design Firm: Fred Wilson and Associates
Construction Contractor: Canaveral Construction

Construction Start: June 2010 Construction Finish: September 2012

#### Install Fire Protection Systems, Various Locations - Group 1

Project Manager: Leo DeCesare, 867-3309 Lead Design Engineer: Neal Colvin, 867-3428 Construction Manager: Don Slayman, 861-7355 Contracting Officer: Bradley O'Toole, 867-2139

This project installs new or extends existing fire suppression systems at the following facilities: Logistics Facility (K6-1547), Fire Station No. 1 (M6-0695), Communications Maintenance and Storage Facility (M6-0791), Orsino Power Substation Building (M6-0996), Industrial Area Chiller Plant (M7-0407), and Payload Support Building (M7-0505). The fire suppression work includes modification of existing and addition of new underground fire suppression supply piping, as well as modification to existing and addition of new wet pipe and dry pipe fire sprinkler systems (work varies by facility). The fire alarm work includes modifications to return additional signals as necessary for fire suppression system operation (all facilities); removal of detection devices and circuits no longer required due to sprinkler installation (all facilities); addition of new air sampling detection (M6-0996); addition of fire alarm radio transceivers for conversion to radio reporting (M6-0695, M6-0996, M6-0791 and M7-0407); and installation of new fire alarm control panels (FACPs) (M6-0695, M6-0996, M7-0407 and M7-505).

The wet pipe fire sprinkler system work is almost complete in M6-0695, pending modifications to sprinkler arm over drops and installation of acoustic tile ceilings. Additional heating, ventilation, and air conditioning work and other required contract modifications are ongoing. A new Simplex 4005 FACP and fire alarm radio transceiver were installed at M6-0695 and a partial preliminary fire alarm test was conducted. Underground piping work is under way for M7-0407 and complete for M6-0695 and M6-0996. Installation of a dry pipe sprinkler system for the loading dock of K6-1547 will start this month. Note that this project involves primarily overhead, above ceiling work. Fire station personnel were temporarily relocated, but personnel at the other



locations should exercise caution around the construction areas and accommodate temporary relocations as needed to allow for short-duration overhead work.

Design Firm: Johnson, Levinson, Ragan, Davila (JLRD) Construction Contractor: Speegle Construction II

Construction Start: June 2010 Construction Finish: January 2012

### **Install Fire Protection Systems, Various Locations - Group 1A**

Project Manager: Leo DeCesare, 867-3309 Lead Design Engineer: Neal Colvin, 867-3428 Construction Manager: Don Slayman, 861-7355 Contracting Officer: Linda Ranow, 867-3422

This project installs new fire suppression systems at the Multifunction Facility (K6-1145) and the VAB Utility Annex (K6-0947). The fire suppression work includes addition of new underground fire suppression supply piping at K6-1145 and addition of new wet pipe fire sprinkler systems at both facilities. The fire alarm work includes modifications to return additional signals as necessary for fire suppression system operation, removal of detection devices and circuits no longer required due to sprinkler installation, and addition of fire alarm radio transceivers for conversion to radio reporting.

The project currently is in the shop drawing submittal review phase with construction preparations beginning at K6-1145. Note that, as with the Group 1 project referenced above, this effort also involves primarily above ceiling work. Due to the need for uninterrupted activity at the Multifunction Facility cafeteria, that work will be done off-shift. However, in all other locations in both of these facilities, personnel should exercise caution around the construction areas and accommodate temporary relocations as needed to allow for short-duration overhead work.

Design Firm: Johnson, Levinson, Ragan, Davila (JLRD) Construction Contractor: Canaveral Construction.

Construction Start Date: October 2010

Construction Finish: July 2011

#### Modify Multi-Payload Processing Facility (MPPF) PHASE 1

Project Manager: Leo DeCesare, 867-3309 Lead Design Engineer: Dung Trang, 861-2266 Construction Manager: Don Slayman, 861-7355 Contracting Officer: Allan Jones, 867-3463

This project replaces the existing chillers, chilled water pumps and dampers at the Multi-Payload Processing Facility (M7-1104). The existing chillers are past their useful life, have failed, and now must be supplemented by trailer-mounted mobile chillers to maintain adequate conditioned air in the facility. The new chillers will be sufficient in size to accommodate the load anticipated to maintain a class 100,000 clean room high bay, with full redundancy.

The project currently is in the shop drawing submittal review phase. Installation is scheduled to begin in January 2011. There will be construction noise during construction and scheduled (short-duration) utility service interruptions. Personnel should use caution in the vicinity of all designated construction areas, and obey all detour and warning signs.

Design Firm: Johnson, Levinson, Ragan, Davila (JLRD) Construction Contractor: Precision Companies (PMI)

Construction Start Date: October 2010

Construction Finish: July 2011

#### COMPLETE

#### **Locomotive Maintenance Facility**

Project Manager/Lead Design Engineer/Construction Manager: Mike Le, 867-4435

Contracting Officer: Lester Howard, 867-7432

This design/build project consolidated the aging metal office building and two storage cars into a new facility, in addition to replacing the corroded roof and siding of the Locomotive Maintenance Shop. This project also provided a new fire and lightning protection system for the facility. Construction began in January 2010 and finished September 2010, ahead of the planned January 2011 completion date. The facility now is occupied and in operation.

Design/Build Firm: Cape Design Engineering Company Construction Contractor: Cape Canaveral Construction

Construction Start: January 2010 Construction Finish: September 2010

